



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,724	06/15/2007	Nicolas Gaillard	1759.235	3297
23405 7590 05/15/2009 HESLIN ROTHENBERG FARLEY & MESTI PC 5 COLUMBIA CIRCLE ALBANY, NY 12203				
EXAMINER PEZZUTO, HELEN LEE				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
05/15/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/599,724

**Applicant(s)**

GAILLARD ET AL.

**Examiner**

Helen L. Pezzuto

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/6/09 has been entered.

***Response to Amendment***

Applicant's amendment to claims 1, 10, and 17 filed in the response on 5/6/09 is acknowledged. Currently, claims 1-11, and 13-17 are pending in this application.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-11, and 13-17 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1796

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11, and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Albrecht et al. (US-887) or Oswald et al. (US-853) (excluding claims 4-5).

US 6,187,887 to Albrecht et al. discloses water-soluble or water-swellaable copolymer comprising structural units a), b), c), and d) as defined in formula (I), (IIa) and/or (IIb), (III), and (IV), respectively, encompassing the instant anionic, non-ionic, cationic and additional monomeric recurring units (col. 2, line 40 to col. 4, line 44; col. 5, lines 9-21; working Examples). Prior art further suggests incorporating 0.0001-50 mol% of crosslinking monomers (col. 4, lines 48-64), and 0.1-30 mol% structural component (e), which further embraces the instant anionic monomers (col. 4, line 65 to col. 5, line 8). The respective proportions of the various monomeric components are within those expressed in the present claims, with a preferred amount of 40-80 mol% (a) and 2-30

mol% (c), meeting the recited  $y > x$  limitation (col. 5, lines 9-15). The resultant copolymer has a number average molecular weight of 50,000 to 5,000,000, and is taught to have utilities as additives in aqueous building materials, water-based paints and coating system (see abstract; col. 5, lines 16-21; col. 6, line 66 to col. 7, line 3). US-887 suggests using 0.05-5 wt% of the resultant copolymer based on the dry weight of the construction material, paint or coating system (col. 7, lines 4-9). Thus, anticipating the present claims.

US 6,395,853 to Oswald et al. discloses water-soluble copolymer with utilities as additives in cemented deep well exploration and petroleum or natural gas production. Specifically prior art teaches a copolymer comprising recurring units A), B), C1), or C2), and may further contain 2-95 wt% of formula (5) as defined by formulas (1), (2), (3), (4), and (5) respectively, embracing the instant copolymer containing anionic, non-ionic, cationic and additional monomeric recurring units (see abstract; col. 4, lines 56-60; col. 5, line 14 to col. 6, line 15; working Examples). Prior art further suggests adding 1-80 wt% of acrylamide and/or acrylic acid, embracing the instant anionic, non-ionic, and additional monomeric units (col. 6,

lines 15-22). The respective proportions of the various monomeric components are within those expressed in the present claims, meeting the recited  $y > x$  limitation (col. 6, lines 15-31). The resultant copolymer has a number average molecular weight ranges from 50,000 to 3,000,000 (col. 6, lines 35-38), and is used in an amount of 0.1-2.0 wt% based on the cement used to cement slurries of conventional composition (col. 9, lines 16-27). Thus, anticipating the present claims.

5. Claims 1-3, 6-11, and 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Schinabeck et al. (US-760).

US 7,238,760 to Schinabeck et al. discloses water-soluble or water-swellaable copolymer comprising structural units a), b), c), and d) as defined in formula (I), (IIa) and/or (IIb), (IIIa), and (IV), respectively, embracing the instant anionic, non-ionic, cationic and additional monomers (col. 3, line 20 to col. 6, line 30; working Examples). The respective proportions of the various monomeric components are within those expressed in the present claims, with a preferred amount of 40-80 mol% (a) and 2-30 mol% (c), meeting the recited  $y > x$  limitation (col. 5, lines 9-15). The resultant copolymer has a number average

molecular weight of 50,000 to 20,000,000, and is taught to have utilities as additives in aqueous building materials, water-based paints and coating system (see abstract; col. 6, lines 34-38; col. 8, line 45-49). US-887 suggests using 0.05-5 wt% of the resultant copolymer based on the dry weight of the construction material, paint or coating system (col. 8, lines 50-53). Thus, anticipating the present claims.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Oswald et al. (US-853) or Schinabeck et al. (US-760) in view of Albrecht et al. (US-887).

As discussed, US-853 and US-760 discloses water-soluble or water-swellaible copolymers within the scope of the instant amphoteric polymer. prior art references teach all the recited monomers within the relative proportions expressed in the present claims. Prior art references appear to be silent

regarding the use of a crosslinking agent. Analogous US-887 specifically discloses using 0.0001 to 50 mol% of a crosslinking agent as required in specific application, including diacrylates and methylene-bis-acrylamide as expressed in the present claims. Accordingly, it would have been obvious to one having ordinary skill in the art to incorporate a crosslinker as required by specific application, motivated by the reasonable expectation of success as taught by US-887. Thus, rendering obvious the present claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helen L. Pezzuto/  
Primary Examiner  
Art Unit 1796

hlp